JUMPSHOT U.R.

Field Conversion Kit Instructions

Bally

MIDWAY MFG. CO.

10601 W. Belmont Avenue
Franklin Park, Illinois 60131
U.S.A.

Phone: (312) 451-9200 Cable Address: MIDCO Telex No.: 72-1596

M051-00E18-A012

WARNING

THIS GAME MUST BE GROUNDED. FAILURE TO DO SO MAY RESULT IN DESTRUCTION TO ELECTRONIC COMPONENTS.

WARNING: This equipment Generates, Uses and can Radiate Radio Frequency Energy and if not installed and used in accordance with the Instructions Manual, may cause interference to Radio Communications. As temporarily permitted by Regulation it has not been tested for compliance to Subpart J or Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a Residential Area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

ELECTRICAL BULLETIN: FOR ALL APPARATUS COVERED BY THE CANADIAN STANDARDS ASSOCIATION (CSA) STANDARD C22.2 NO. 1, WHICH EMPLOYS A SUPPLY CORD TERMINATED WITH A POLARIZED 2-PRONG ATTACHMENT PLUG.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

ATTENTION: POUR PREVENIR CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

Bally/MIDWAY T.M.

Invites You To Use

OUR TOLL FREE NUMBER FOR SERVICE INFORMATION CONCERNING THIS GAME, OR ANY OTHER BALLY/MIDWAY™ GAME YOU NOW HAVE ON LOCATION.

CALL US FOR PROMPT, COURTEOUS ANSWERS TO YOUR PROBLEMS.

Video or Pinball - Continental U.S. 800-323-7182

Bally/MIDWAY T.M. 10601 West Belmont Avenue Franklin Park, Illinois, 60131 phone (312) 451-9200

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Printed In U.S.A.

LIST OF MAJOR PARTS
INCLUDED IN YOUR PAC-PACK FIELD KIT FOR
CONVERTING PAC-MAN / MS. PAC-MAN U.R. TO JUMPSHOT U.R.

PART NUMBER	DESCRIPTION
E18A-00803-0003	EPROM: 2532-45 (Position "5E" on Main Game Logic Board)
E18A-00803-0004	EPROM: 2532-45 (Position "5F" on Main Game Logic Board)
E18A-00803-0005	EPROM: 2532-45 (Position "6E" on Main Game Logic Board)
E18A-00803-0006	EPROM: 2532-45 (Position "6F" on Main Game Logic Board)
E18A-00803-0007	EPROM: 2532-45 (Position "6H" on Main Game Logic Board)
E18A-00803-0008	EPROM: 2532-45 (Position "6J" on Main Game Logic Board)
E18A-00803-0009	BP-PROM (Position "4A" on Main Game Logic Board)
E18A-00803-0010	BP-PROM (Position "7F" on Main Game Logic Board)
0E18-00804-0001	RIBBON CABLE ASSY. - 40 PIN
BE18-00004-0000	SECURE CPU MODULE W/POTTING (AUXILIARY P.C. BD.)
*0595-00107-0000	MOUNTING BRACKET - AUXILIARY P.C. BD.
*0017-00101-0141	8 X 11/16" UN SLOT. HEX HD. (W/WASHER) M.S. (2 Req'd.)
*0017-00042-0231	PLASTIC MOUNTING - STAND-OFFS - 3/4"-AUXILIARY P.C. BD. (4 Req'd.)
0E18-00900-00XF	GLASS: HEADER
0E18-00901-00XF	MAIN-DISPLAY-GLASS
0E18-00902-0000	DECAL: SIDE (RIGHT & LEFT) (2 Req'd.)
0E18-00903-0000	DECAL: FRONT
0017-00009-0624	TOOL: BURNISHING
M051-00127-A011	PAC-PACK U.R. CONVERSION KIT INSTRUCTIONS
M051-00E18-A012	JUMPSHOT U.R. CONVERSION KIT INFORMATION SHEETS
M051-00E18-A007	OPTION SWITCH SETTINGS TAG
AE18-00008-0000	MASTER CONTROL CABLE ASSY.
0017-00042-0622	CABLE TIE: L = 3-7/8" (8 Req'd.)

*** FOR PAC-MAN CONVERSION KITS ONLY**

LIST OF MAJOR PARTS (Cont'd.)
INCLUDED IN YOUR PAC-PACK FIELD KIT FOR
CONVERTING PAC-MAN / MS. PAC-MAN U.R. TO JUMPSHOT U.R.

PART NUMBER	DESCRIPTION
*0E18-00101-0100	BRACKET: CONTROL SHELF MOUNTING - RIGHT
*0E18-00101-0200	BRACKET: CONTROL SHELF MOUNTING - LEFT
AE18-00005-0000	CONTROL SHELF ASSY. (Includes the following 13 items)
AE18-00006-0000	CONTROL SHELF CABLE
AE18-00007-00XF	CONTROL SHELF - WELD ASSY.
0E18-00904-0000	OVERLAY: CONTROL SHELF
0017-00032-0093	SWITCH: PUSH BUTTON W/HOLDER (2 Req'd.)
0151-00804-0001	PUSH-BUTTON-WHITE (2 Req'd.)
0017-00103-0054	NUT 5/8 - 11/16" PAL (2 Req'd.)
A932-00022-0000	MOLDED BALL & SHAFT ASSY. (2 Req'd.)
0017-00100-0025	1/4" E RING (2 Req'd.)
0921-00702-0000	SPACER: STOP (2 Req'd.)
0921-00902-0000	SLIDE PLATE (GROMMET) (2 Req'd.)
0017-00103-0011	NUT 10-32" LOCKING (8 Req'd.)
0921-00700-0000	ACTUATOR (2 Req'd.)
A349-00015-0000	CONTROL ASSY. - 8 POSITION (Includes the following 9 items)
A349-00014-0000	TOP PLATE & PIVOT ASSY.
A921-00009-0000	STOP PLATE & SWITCH BRACKET ASSY.
A932-00009-0000	SWITCH ASSY.: CONTROL
0017-00101-0298	5-40 X 5/8" PHIL. RND. HD. M.S.
0017-00101-0598	8-32 X 5/16" SLOT. HEX HD. (W/Washer) TYPE II
0020-00202-0000	PLATE: SWITCH
0927-00908-0000	PLATE: WEAR
0932-00902-0000	GROMMET
0962-00904-0000	SLEEVE

* FOR PAC-MAN CONVERSION KITS ONLY

JUMPSHOT

GAME OPERATION

Jumpshot is a one or a two player model with a color T.V. monitor. The game has three possible modes of operation: ATTRACT, PLAY, and SELF-TEST.

SELF-TEST MODE

The Self-Test mode is a special mode for checking the game switches and computer functions. It is the easiest and best way to check for proper operation of the entire game.

NOTE: Putting the game into Self-Test will cause it to erase any CREDITS it has on it from its memory.

You may begin a Self-Test at any time by sliding the Self-Test switch to the "ON" position after the power to the game is on. The test switch is located inside the coin door under the coin meter.

SELF-TEST DISPLAY
AND BOARD LOCATION COORDINATES

MEMORY OK or
Rom-1/Bad C Ram-0/Bad W Ram-1/etc.

*1 PLAYER/CREDIT **or**
2 PLAYERS/CREDIT
*SHORT TIME LIMIT
* = switch selectable

1. If a bad ROM or RAM is found by the game's internal check system during the Self-Test, the game indicates this to you by showing the location code of the bad chip(s) in place of the "MEMORY OK" message. The following table translates the chip location codes into actual positions on the game logic P.C. Board.

DISPLAY	DESCRIPTION
MEMORY OK	All RAMs are good.
BAD V RAM-0	RAM located on Logic PC board at position 4K is bad.
BAD V RAM-1	RAM located on Logic PC board at position 4N is bad.
BAD C RAM-0	RAM located on Logic PC board at position 4L is bad.
BAD C RAM-1	RAM located on Logic PC board at position 4P is bad.
BAD W RAM-0	RAM located on Logic PC board at position 4M is bad.
BAD W RAM-1	RAM located on Logic PC board at position 4R is bad.
MEMORY OK	All ROMs are good.
BAD ROM-0	ROM located on Logic PC board at position 6E is bad.
BAD ROM-1	ROM located on Logic PC board at position 6F is bad.
BAD ROM-2	ROM located on Logic PC board at position 6H is bad.
BAD ROM-3	ROM located on Logic PC board at position 6J is bad.

2. When finished with the Self-Test mode, slide the Self-Test switch back to the "OFF" position.
   - A cross hatch pattern appears on the monitor screen for about 2 seconds.
   - If you wish to keep this test pattern on the monitor screen for further use, slide Self-Test switch back to the "ON" position **after** the cross hatch appears and **before** it disappears.
   - When finished with the cross hatch pattern, set the Self-Test switch to the "OFF" position.
   - Normal game functions will now return to the monitor screen.

ATTRACT MODE

1. The Attract mode starts:
   - Just after power has been turned on to the game.
   - After a Self-Test has been completed. (Performing a Self-Test sets the credits in the games memory to zero "0".)
   - After a play has been finished and there are no more credits left in the games memory.
   - No matter where the game is in the Attract mode sequence, it will immediately go to the Play mode display (after a game has been paid for) as soon as either the "1 Player" or the "2 Player" start button is pressed.

READY-TO-PLAY MODE

1. The Ready-To-Play mode starts when enough coins have been accepted for a 1 or a 2 player game.
2. The Ready-To-Play mode ends when either the "1 PLAYER" or the "2 PLAYER" push button is pressed.
3. If no START button is pressed, the displays will remain on the monitor screen indefinitely.

PLAY MODE

1. After enough coins have been accepted for a 1 or a 2 Player game, the Play mode begins when either the "1 Player or the "2 Player" start button is pressed.
2. The Play mode ends when the game time has elapsed. When this happens, "GAME OVER" is written across the center of the monitor screen.
3. In case of a tie score after the game time has elapsed, an overtime period of 24 seconds is provided to break the tie.

JUMP SHOT

OPTION SWITCH SETTINGS

GAME TIME

	SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8
5 MINUTES TOTAL GAME TIME	ON	ON						
4 MINUTES TOTAL GAME TIME	OFF	ON						
2 MINUTES TOTAL GAME TIME	ON	OFF						
3 MINUTES TOTAL GAME TIME	*OFF	OFF						

PLAYER SELECTION

PLAYER 1 BLACK	ON
WHITE	*OFF
PLAYER 2 BLACK	ON
WHITE	*OFF

METHOD OF PLAY

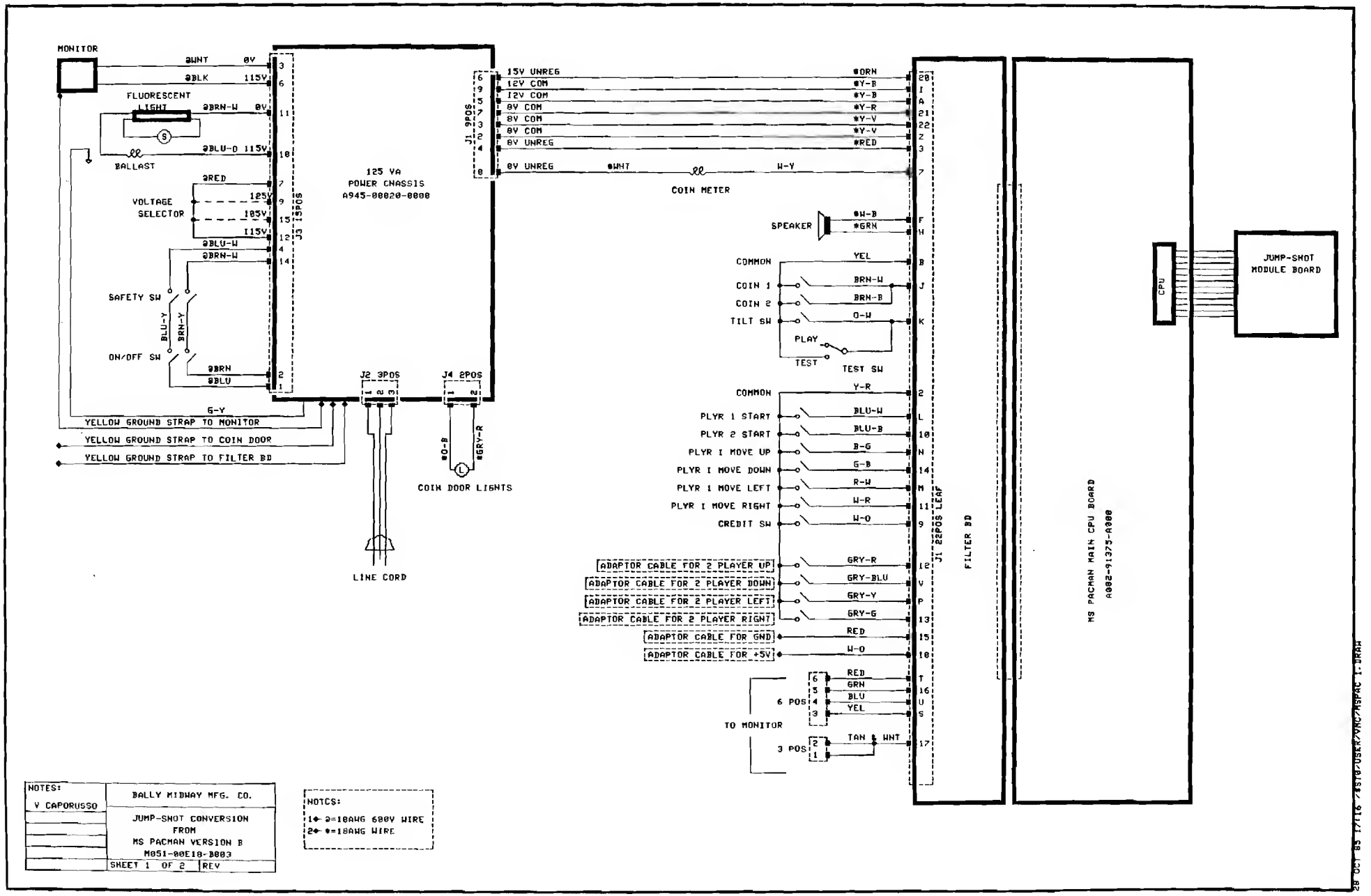
FREE PLAY	ON
NORMAL PLAY	*OFF
1 PLAYER PER 1 CREDIT	ON
1 OR 2 PLAYERS PER 1 CREDIT	*OFF

ATTRACT MODE SOUNDS

ATTRACT SOUNDS - ON	ON	ON
ATTRACT SOUNDS - OFF	*OFF	OFF

* INDICATES FACTORY RECOMMENDED SETTINGS

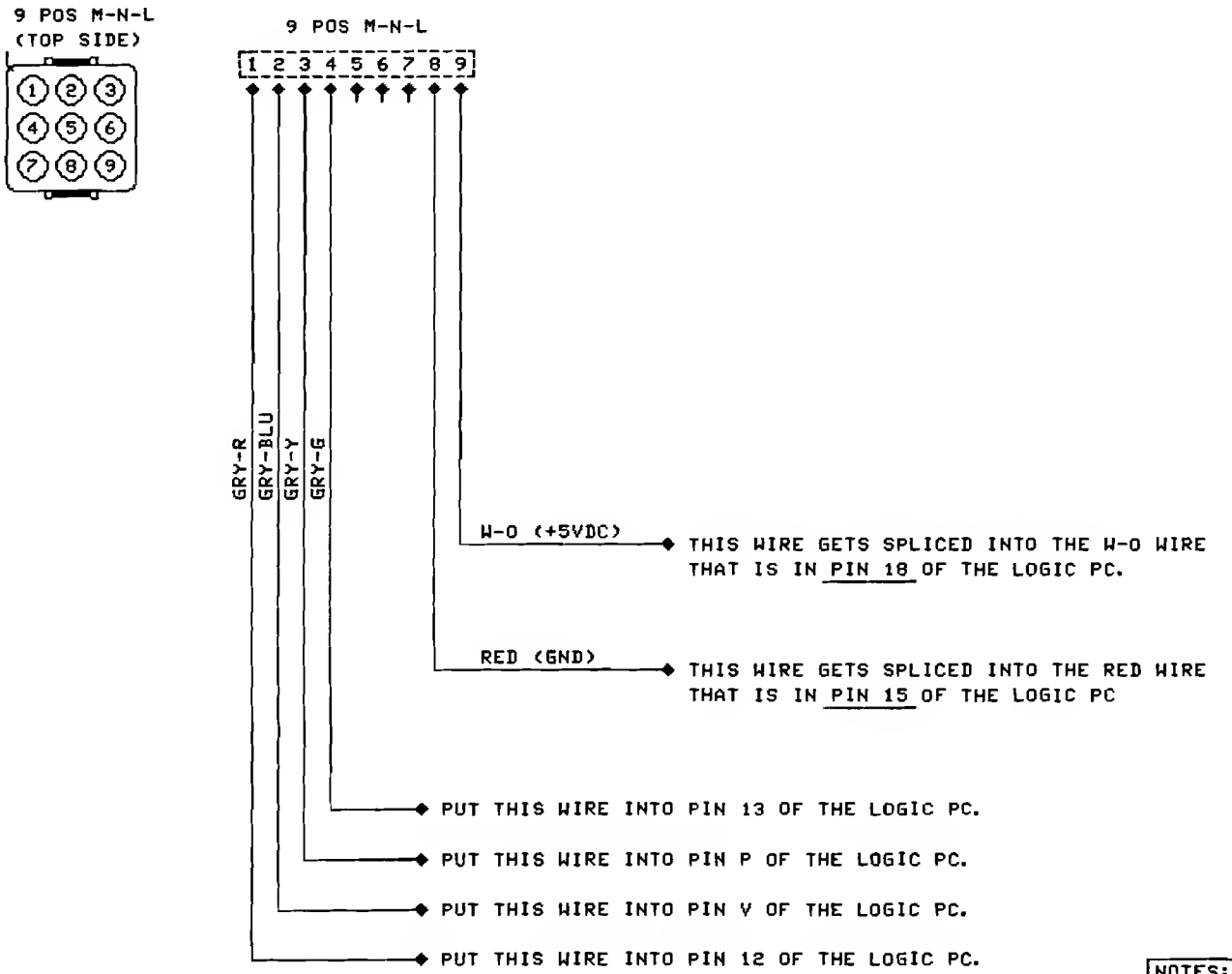
PART NO. M051-00E18-A007



NOTES:	BALLY MIDWAY MFG. CO.
V CAPORUSSO	
	JUMP-SHOT CONVERSION FROM MS PACMAN VERSION B M051-00E18-B003
	SHEET 1 OF 2 REV

NOTES:
1◆ @=18AWG 600V WIRE
2◆ *=18AWG WIRE

28 OCT 85 17:16 /ASTRO/USER/VAC/MSPAC 1.DRAW



NOTES:	BALLY MIDWAY MFG. CO.	
V CAPORUSSO	ADAPTOR CABLE FOR JUMP-SHOT CONVERSION VERSION A M051-00E18-A003	
	SHEET 2 OF 2	REV B

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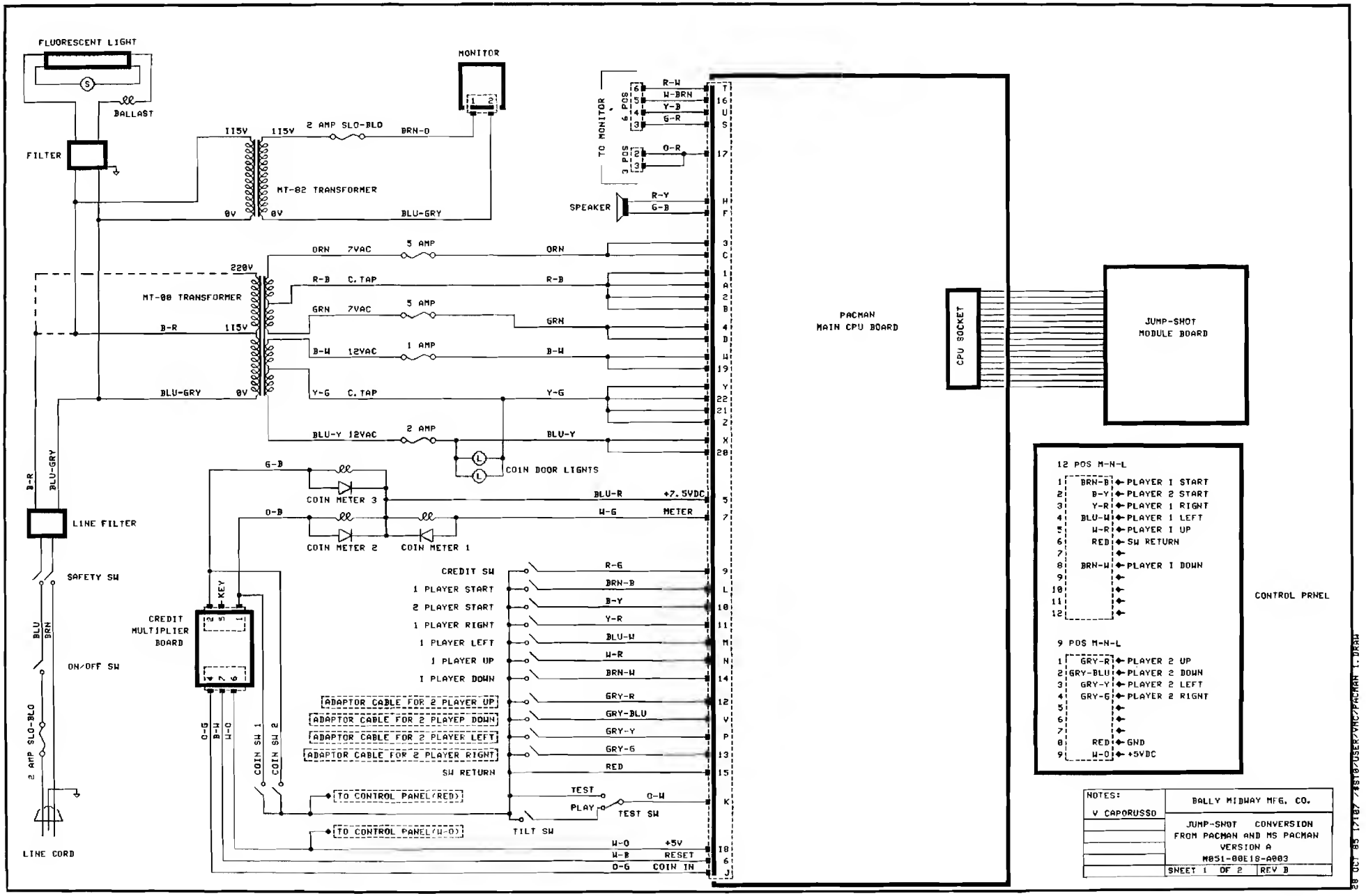
FLUORESCENT LIGHT
BALLAST
MONITOR
FILTER
115V
115V
2 AMP SLO-BLO
BRN-O
MT-82 TRANSFORMER
0V
0V
BLU-GRY
TO MONITOR
6 POS
3 POS
R-W
W-BRN
Y-B
G-R
O-R
SPEAKER
R-Y
G-B
220V
MT-88 TRANSFORMER
B-R
115V
ORN 7VAC 5 AMP ORN
R-B C.TAP R-B
GRN 7VAC 5 AMP GRN
B-W 12VAC 1 AMP B-W
BLU-GRY 0V
Y-G C.TAP Y-G
BLU-Y 12VAC 2 AMP BLU-Y
COIN DOOR LIGHTS
G-B
COIN METER 3
BLU-R +7.5VDC
O-B
W-G METER
COIN METER 2
COIN METER 1
LINE FILTER
SAFETY SW
BLU
BRN
ON/OFF SW
2 AMP SLO-BLO
LINE CORD
CREDIT MULTIPLIER BOARD
KEY
CREDIT SW R-G
1 PLAYER START BRN-B
2 PLAYER START B-Y
1 PLAYER RIGHT Y-R
1 PLAYER LEFT BLU-W
1 PLAYER UP W-R
1 PLAYER DOWN BRN-W
ADAPTOR CABLE FOR 2 PLAYER UP GRY-R
ADAPTOR CABLE FOR 2 PLAYER DOWN GRY-BLU
ADAPTOR CABLE FOR 2 PLAYER LEFT GRY-Y
ADAPTOR CABLE FOR 2 PLAYER RIGHT GRY-G
SW RETURN RED
O-G
B-W
O-R
COIN SW 1
COIN SW 2
TO CONTROL PANEL(RED)
TO CONTROL PANEL(W-O)
TEST
PLAY
O-W
TEST SW
TILT SW
W-O +5V
W-B RESET
O-G COIN IN
PACMAN
MAIN CPU BOARD
CPU SOCKET
JUMP-SHOT
MODULE BOARD
12 POS M-N-L
1 BRN-B PLAYER 1 START
2 B-Y PLAYER 2 START
3 Y-R PLAYER 1 RIGNT
4 BLU-W PLAYER 1 LEFT
5 W-R PLAYER 1 UP
6 RED SW RETURN
8 BRN-W PLAYER 1 DOWN
9 POS M-N-L
1 GRY-R PLAYER 2 UP
2 GRY-BLU PLAYER 2 DOWN
3 GRY-Y PLAYER 2 LEFT
4 GRY-G PLAYER 2 RIGNT
8 RED GND
9 W-O +5VDC
CONTROL PRNEL
NOTES:
V CAPORUSSO
BALLY MIDWAY MFG. CO.
JUMP-SHOT CONVERSION
FROM PACMAN AND MS PACMAN
VERSION A
M051-00E18-A003
SHEET 1 OF 2 REV B
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